## CHARGE FEES FOR NEW CLAIMS TO DEPOSIT ACCOUNT

One new independent claim and six new dependent claims are submitted, giving a total of 25 pending claims, of which four are independent. Please charge the fees of $170.00 required for the new claims ($80 per independent claim in excess of three, and $18 per claim in excess of 20), to <u>Lucent Deposit Account No. 12-2325</u>. Should a greater or lesser fee be required, please charge or credit the same to Lucent Deposit Account no. 12-2325, and notify the undersigned.

Please amend the application as follows:

## IN THE CLAIMS:

Please add the following new claims:

29. (new)    An analog method of evaluating an algebraic operation on a selected matrix, components of the selected matrix being represented by single-stranded portions of oligomers that include sequences of nucleic acids or nucleic acid analogs, comprising:

adding one of the oligomers to a solution in response to determining that the component represented by the one of the oligomers has a positive amplitude; and

adding a complement of the one of the oligomers to the solution in response to determining that the component represented by the one of the oligomers has a negative amplitude; and

performing an operation on the solution that represents the algebraic operation on the selected matrix.

30.   (new)    The method of claim 29, further comprising:

changing the concentration of the oligomers in the solution in response to determining

that the algebra includes multiplying the matrix by a scalar.


31.   (new)    The method of claim 29, wherein the performing further comprises:

mixing a new set of oligomers of nucleic acids or analogs to nucleic acids into the

solution in response to the algebra operation including making a product of the selected

matrix with a vector, the new set of oligomers representing the vector.


32.   (new)    The method of claim 31, wherein the mixing enables an oligomer of the

new set to hybridize to a single-stranded portion of an oligomer that represents a component

of the selected matrix.


33.   (new)    The method of claim 31, wherein the performing further comprises:

doing an operation on the solution whose result depends on concentrations of double-

stranded hybridization products formed by the mixing.


34.   (new)    The method of claim 31, wherein the performing further comprises:

determining the value of the product of the selected matrix with the vector based on

concentrations of hybridized oligomers produced by the mixing.


35.   (new)    The method of claim 29, wherein the matrix is a vector.